



METHOD FOR DETECTING NUCLEIC ACID SEQUENCES

FIELD OF THE INVENTION

5 The field of this invention is arrays having associated oligonucleotides and uses thereof.

BACKGROUND OF THE INVENTION

Arrays of binding agents, such as oligonucleotides, have become an increasingly important tool in the biotechnology industry and related fields. These arrays, in which a plurality of binding agents are deposited onto a solid support surface in the form of an array or pattern, find use in a variety of applications, including drug screening, nucleic acid sequencing, mutation analysis, and the like. One important use of arrays is in the analysis of differential gene expression, where the expression of genes in different cells, normally a cell of interest and a control, is compared and any discrepancies in expression are identified. In such assays, the presence of discrepancies indicates a difference in the classes of genes expressed in the cells being compared.

In methods of differential gene expression, arrays find use by serving as a substrate with bound binding fragments such as oligonucleotides. Nucleic acid sequences are obtained from analogous cells, tissues or organs of a healthy and diseased organism, and hybridized to the immobilized set of binding fragments associated with the array. Differences between the resultant hybridization patterns are then detected and related to differences in gene expression in the two sources.

A variety of different array technologies have been developed in order to meet the growing need of the biotechnology industry. Despite the wide variety of array technologies currently in preparation or available on the market, there is a continued need to identify new array devices to meet the needs of specific applications. Of particular interest are arrays which

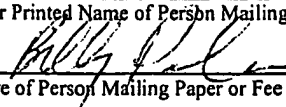
"Express Mail" Mailing Label No. EL 563 386 315 US

Atty Docket No. OLIG-017CON

Date of Deposit September 25, 2000

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CONTINUATION PATENT APPLICATION

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